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Technical Assistance Module (TAM)

Integrated Financial Management Systems Best Practices: Bolivia and Chile

2004



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Foreword

The Americas' Accountability/Anti-Corruption Project (AAA) is an initiative funded by the United States Agency for International Development (USAID). Now in its third phase, the Project, which began in 1993, is administered by Casals and Associates, Inc., to support USAID Missions in the Latin America and Caribbean region (LAC) in design and implementation of anti-corruption programs.

The AAA Project identifies, documents and disseminates best practices through a series of Technical Assistance Modules (TAM) that focus on specific reforms aimed at increasing transparency in LAC countries. These reforms are presented as promising practices to generate interest and discussion among practitioners and promote replication of the most successful experiences in the region.

TAMs are disseminated through a variety of methods and shared with multiple stakeholders, including USAID Missions, international donor organizations, business and professional associations, civil society organizations (CSOs), government officials interested in pursuing reforms and practitioners seeking opportunities for replication. TAMs also can be used to develop and support bilateral mission and regional activities.

TAM development includes soliciting input from stakeholders engaged in good governance and anti-corruption/accountability activities. Conferences, workshops, forums, external assessments and evaluations, research initiatives and consultations with experts also contribute. Moreover, TAMs identify national and local experiences that provide valuable practical information relative to improving governance and increasing transparency and accountability.

TAMs are not meant to be prescriptive. Their general objectives are to:

- Provide examples of anti-corruption activities;
- Generate discussion among practitioners in the field and promote replication of successful models;
- Illustrate best practices, presenting the tools, methodologies and frameworks being used to fight corruption;
- Describe programming approaches and strategies;
- Provide an overview of activities of others engaged in reducing corruption: donors, CSOs and the private sector;
- Present reform-program case studies, and
- Direct readers to additional resources.

Acknowledgements

Information for the preparation of this TAM was derived from two primary sources. The first was the “Summit on Reducing Poverty through Improving Public Financial Management,” sponsored, in November 2002, by the International Consortium on Government Financial Management (ICGFM) and the World Bank Institute. At the Summit, the AAA Project sponsored a panel of representatives from the Bolivian and Chilean IFMS implementing teams, who discussed their respective country experiences with the systems.

Second, AAA Project experts carried out extensive research, consulted with IFMS technical experts and conducted field visits to Bolivia and Chile, in May 2003, to research first hand the status of the two systems and learn directly from technicians and key decision makers about the challenges encountered during implementation and subsequent operation.

The AAA Project wishes to acknowledge the contributions of Carmen Zuleta, Technical Director of the Bolivian integrated financial system (SIGMA) and Leonardo Sanchez and Alvaro Torres, Financial and Information Technology Coordinators, respectively, of the Chilean integrated financial system (SIGFE), who provided information and guidance.

The AAA Project team benefited from the expertise and advice of Alvaro Ramirez, Executive Director of the Graduate Program on Public Sector Modernization of the University of Chile and from Ivan Arias, former Bolivian Vice Minister for Municipal Development and Decentralization.

This TAM would not have been possible without the counsel of James Wesberry, CPA, Director of C&A’s USAID Democracy and Governance Strengthening project in Mexico, who recommended the Bolivia and Chile experiences for their relevancy and provided incisive commentary on the final document.

From the AAA Project, Patricio Maldonado, Gerardo Berthin, Lourdes Sanchez, Sylvia Rodriguez and Joseph Balcer provided guidance and support.

Abbreviations

AAA	Americas' Accountability/Anti-Corruption Project
CONSAFCO	<i>Consejo del Sistema de Administración Financiera y Control, Bolivia</i> Council of the Financial Management and Control System, Bolivia
CUT	<i>Cuenta Unica del Tesoro, Bolivia</i> Unified Account of the Treasury, Bolivia
DIPRES	<i>Dirección Presupuestos, Chile</i> Budgeting Directorate, Chile
GDP	Gross Domestic Product
GOB	Government of Bolivia
GOC	Government of Chile
HIPC	Heavily Indebted Poor Countries
ICGFM	International Consortium on Government Financial Management
IDA	International Development Association
IDB	Inter-American Development Bank
IFMS	Integrated Financial Management System
IMF	International Monetary Fund
NEP	New Economic Plan, Bolivia
NIP	National Integrity Plan, Bolivia
ODA	Official Development Assistance
PCU	Project Coordinating Unit
PEMP	Public Expenditure Management Project
PIU	Project Implementation Unit
PMG	<i>Programa de Mejoramiento de la Gestión, Chile</i> Program to Improve Public Administration, Chile
PRYME	<i>Proyecto de Reforma y Modernización del Estado, Chile</i> Reform and Modernization of the State Project, Chile
SAFCO	<i>Sistema de Administración Financiera y Control, Bolivia</i> Financial Management and Control System, Bolivia
SICOPRE	<i>Sistema de Contabilidad Presupuestaria, Bolivia</i> Budgetary Accounting System, Bolivia
SINCOM	<i>Sistema Integrado de Contabilidad Municipal, Bolivia</i> Integrated System of Municipal Accounting, Bolivia

SIGFE	<i>Sistema de Información para la Gestión Financiera del Estado, Chile</i> Information System for the Financial Management of the State, Chile
SIGMA	<i>Sistema Integrado de Gestión y Modernización Administrativa, Bolivia</i> Integrated Administrative Modernization and Management System, Bolivia
SIRESE	<i>Sistema de Regulación Sectorial, Bolivia</i> Sectoral Regulation System, Bolivia
SIIF	<i>Sistema Integrado de Información Financiera, Bolivia</i> Integrated Financial Information System, Bolivia
SLCC	<i>Secretaría de Lucha Contra la Corrupción</i> Secretariat Against Corruption, Bolivia
SNIT	<i>Sistema Nacional de Información Territorial, Chile</i> National System of Territorial Information, Chile
TAM	Technical Assistance Module
UEPEX	<i>Unidades Ejecutoras de Prestamos Externos, Bolivia</i> Foreign Loans Managing Units, Bolivia
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
UTCC	<i>Unidad Técnica de Lucha Contra la Corrupción, Bolivia</i> Technical Unit for the Fight Against Corruption, Bolivia

Executive Summary

It is widely acknowledged that fully functioning integrated financial management systems contribute to improved governance, by providing real-time financial information that financial and other managers can utilize to effectively administer programs, develop budgets and manage resources. An IFMS can also be a deterrent to corruption by enhancing government transparency and accountability.

During the past decade, IFMS has been implemented in governments throughout Latin America with varying degrees of success. Where IFMS has been introduced successfully, it has increased public sector legitimacy, produced timely and efficient accounting of public resources, increased government accountability and transparency and made it possible to audit public accounts and strengthen internal control in government units.

This TAM, about the experiences of Bolivia and Chile in implementing integrated financial management systems (IFMS) in the national governments, examines the state of development of the two systems, political and bureaucratic environments in which they evolved and currently function, legal frameworks, roles and perspectives of stakeholders and key actors, financing and policy considerations.

The Bolivian Integrated Administrative Modernization and Management System (*Sistema Integrado de Gestión y Modernización Administrativa*—SIGMA) and the Chilean Integrated Financial Management System (*Sistema de Información para la Gestión Financiera del Estado*—SIGFE) are ongoing IFMS initiatives that are part of much broader public-sector modernization efforts, including civil service reform, decentralization and e-government. Both systems seek to enhance the efficiency, effectiveness and transparency of government financial management.

In particular, this TAM focuses on the environments in which SIGMA and SIGFE were created and are being implemented. It also examines the roles of stakeholders, implementation strategies pursued and the challenges encountered. The two cases demonstrate that the IFMS implementation process is complex and multidimensional, often driven by diverse and not-necessarily complementary expectations of policy makers and other stakeholders.

The intent is not to judge the merits of either system, but to examine the processes and highlight the lessons learned.

Key Lessons Learned

Overall Strategy

- IFMS reform must be an integral part of a well-defined, interrelated and interactive state modernization strategy.
- IFMS implementation must be staged, with the new system being tested in pilot agencies where results can be evaluated.
- Particular emphasis must be placed on publicizing the benefits of IFMS, to ensure that all stakeholders understand them and to build support constituencies.

- IFMS should be designed to have sufficient flexibility to be responsive to different and changing institutional needs at national and sub-national levels.
- IFMS implementation design must include a comprehensive sustainability strategy.

Existing Conditions

- A basic legal framework in support of IFMS is necessary but, by itself, is not sufficient to guarantee positive results.
- Explicit and continuous advocacy for the value of IFMS to government administration has positive effects in legitimizing and implementing it.
- Consistent and reliable availability of financial resources is vital to the entire IFMS cycle.

Personnel

Building a cadre of knowledgeable personnel, with the needed technical skills to implement, manage and operate an IFMS is critical for obtaining sustainable results.

Actors and Stakeholders

- A sense of ownership by managerial, coordinating, and technical personnel, as well as by national and sub-national officials, reduces potential resistance and builds a critical mass of support for the system.
- Donor support is vital, particularly in the early phases of implementation. Nonetheless, interaction with donors must be strategic and selective to prevent the perception of donor over-involvement. Ideally, IFMS initiatives should be demand-driven and not externally imposed.

Software, Technology and Applications

- The IFMS software and hardware platforms should be sustainable using expertise available within the country and, if possible, built on systems already in place.
- New, sophisticated software applications do not guarantee success and are not automatically embraced by government personnel. Conversely, in-house systems, while more affordable, may not have the technological capacity or internal control capabilities required.
- Ultimately, the effectiveness of IFMS as a financial management tool is dependent on the ability to finance and the capacity to maintain and utilize relevant technology. If either is lacking, the system will not provide useful and timely information to decision makers.

I. Introduction

A. Objective of the Technical Assistance Module

Efforts to promote reform in the structure and functions of public institutions are a normal part of the ongoing evolution of government. During the last decade and to this day, considerable sums of country and international donor funds have been invested in financial management reform—in some cases successfully and in others less so. In all of these efforts, there are lessons to be learned that can guide future initiatives.

This TAM examines the experiences of Bolivia and Chile in implementing national integrated financial management systems, the state of development of the two systems, political and bureaucratic environments in which they evolved and currently function, legal frameworks, roles and perspectives of stakeholders and key actors and policy considerations.

Through the examination of these two efforts, a basic framework evolves for understanding the design, implementation, critical decision-making junctures and other elements required for IFMS sustainability. Rather than being prescriptive, the TAM focuses on the processes involved, in order to identify useful lessons for those currently building such systems or contemplating doing so.

No judgment is made of the quality of the systems, as both are works in progress. Rather, by examining the policy and implementation processes pursued in each country, the AAA Project hopes to contribute to the dialogue on institutional reform, generally, and IFMS development, specifically, thereby enhancing the potential for success of future government modernization efforts.

B. Background

It is widely acknowledged that fully functioning integrated financial management systems improve governance by providing real-time financial information that financial and other managers can utilize to administer programs effectively, develop budgets and manage resources. IFMS can also be a deterrent to corruption by increasing government transparency and accountability.

During the past decade, IFMS has been implemented in governments throughout Latin America with varying degrees of success. Where they have been introduced successfully, IFMS has improved public sector legitimacy, produced timely and efficient accounting for public resources, increased government accountability and transparency and opened the door for the audit of public accounts and strengthening of internal control in government units.

IFMS has also laid a foundation for anti-corruption reforms by:

- Enabling budget tracking;
- Monitoring actual cash flows;
- Helping to manage key assets (e.g., buildings, land, equipment, vehicles, and other state resources);
- Encouraging decentralization by enabling local planning and decision-making;

- Enhancing accountability and transparency;
- Reducing political discretion, and
- Consolidating all financial-management information thereby enabling management of financial resources.

Key to developing a national IFMS is fully understanding the mission and goals of government, the role played by sub-entities and decentralized units within the overall structure and the relationships among entities. No single element of an IFMS is dominant. It is the parts working as a whole that make the system work.

Although computerization has provided the tools to integrate increasingly complex organizations and systems information, needs of individual units must be carefully defined and interfaces between the various operating units or information sub-systems understood. Too often, computerization is seen as the "cure" when, in fact, it is only the means for implementing an integrated system; it is not the system itself. Similarly an IFMS must be flexible enough to accommodate the needs and requirements of various types of governmental entities.

Every IFMS shares certain core components, such as budgeting, cash and debt management and accounting. Other ancillary components can be incorporated, the most common of which are asset management, personnel and procurement. Historically, control, especially through external audit, was also considered a key component. Today, internal control remains extremely important, but control structures and techniques in IFMS emphasize and exist in, not apart from, management.

This means that control, as traditionally understood (including external audit), is only one component of a broader system of monitoring—a system that considers the cost/benefit of controls in terms of an entity's overall ability to achieve its goals and emphasizes the integration of internal managerial controls in the decision-making process.

At its core, IFMS is first and foremost a system. Its parts, which are interdependent, cannot function effectively or exist isolated from each other. This has certain implications for the design, development and operation of IFMS.

First, the design must encompass the basic critical elements, such as accounting, budget, treasury management, cash management, public internal and external debt, human resources management and asset management. Similarly, strategic elements such as internal management, monitoring and evaluation and an appropriate legal framework must also be an integral part of the design.

Second, IFMS evolves and unfolds. For sustained growth, the foundation must be solid. Allowances for growth must be integrated from the beginning. One element cannot succeed if another fails.

Third, the relationship between elements of an IFMS is as important as the individual components themselves. How the components will work together must be as carefully planned as each component itself. At the same time, an IFMS has borders—not everything is part of the IFMS. What is not included in an IFMS and its interfaces and linkages is also very important.

Fourth, higher functions delegate basic responsibilities to lower level operations. Primary controls are built into the system through decision-making policies and procedures and through monitoring and detecting significant variances. Controls are designed to operate in synchronization with the flow of activity instead of being a barrier that must be circumvented.

Fifth, IFMS must be continuously updated, never being allowed to become static. A static IFMS is a dying system. A stable IFMS contains the elements of its own renewal. An example of this is the importance of achieving a critical mass of trained, professional staff that can quickly assimilate and train new staff. This is only possible when a majority of the staff has experience with the management and operations of the system itself, as well as a capacity to adjust the IFMS to the evolution of the entity's day-to-day operations.

Finally, at least five core areas must be addressed successfully for IFMS to be sustainable:

- Human resources;
- Technological upgrading and maintenance of technology;
- Norms and regulation;
- Monitoring and evaluation, and
- Institutions.

It is important to understand that an IFMS is not an end in itself. Rather, it is a tool that, when utilized properly, can be both a powerful anti-corruption tool and a means for enhancing development—democratic, economic, social and political.

Box 1**Transparency International's Views on IFMS**

An IFMS is a most important tool for good financial management. Some countries may lack the resources or the capacity to implement a full-blown IFMS. However, they should not be deterred from putting basic building blocks in place such as modern accounting, cash management and internal audit systems and so building up an IFMS on a step-by-step basis.

An IFMS consists of an interrelated set of sub-systems, which plan, process, and report on resources, quantifying them in financial terms. The basic sub-systems normally are accounting, budgeting, cash management, debt management and their related internal controls. Other sub-systems sometimes included are collection and receivables management, acquisitions and supply management, information management, tax and customs administration, retirement and social security system administration, each one with its own related internal controls. One of the most important elements of modern internal control in any government agency consists of an independent and professional internal audit function, which constitutes, together with the other internal controls, an integral part of an IFMS.

The principal factor that "integrates" the system is a common, single, reliable database (or several interconnected databases) to and from which all data expressed in financial terms flows. All of the sub-systems, and all users of financial data must be required to participate in common data sharing. The validation, classification and recording of data is a function of the accounting sub-system which produces timely reports of classified data for use by all systems and others who use financial information.

An IFMS can be developed regardless of a specific organizational structure, but it is likely to function better where the four basic sub-systems—accounting, budgeting, cash management and debt management are closely related within the organizational structure, under a common, professionally qualified financial management executive.

The failure to integrate financial management information often results in:

- Fragmented and unreliable data;
- Duplication of data difficult to reconcile;
- Failure to utilize actual results in the planning and budgeting processes;
- Failure to fully and publicly report results of operations and financial conditions;
- Hidden fiscal transactions, including contingent liabilities, quasi-fiscal transactions, government guarantees and the like, which can surface unexpectedly and cause major fiscal disruption;
- Undue emphasis on one of the component sub-systems (usually budgeting) which tends to dominate, duplicate and crowd out the others.

Source: *Transparency International Source Book 2000*. London: Transparency International, 2000 (Chapter 23, pp. 221-234).

C. Strategies and Approaches to Integrated Financial Management Systems

Since the early 1990s, international donor organizations, such as the World Bank, Inter-American Development Bank (IDB) and USAID, among others, have supported IFMS design and implementation in countries in transition. Some efforts have been part of broader strategies, such as:

- Poverty reduction;
- Public sector management reform;
- Broad democratic governance reform;
- Modernization of the state and rule of law;
- Social services delivery capacity building;
- Anti-corruption programs;
- E-government;
- Decentralization; and
- Enhancing economic development frameworks.

Generally, the approaches have been multi-dimensional and have attempted to put in place key elements of good governance to resolve historical problems (Table 1).

Table 1: Good Governance Elements Strengthened by IFMS Issues Addressed	
Fiscal Oversight	Management of internal and external debt and design of tax and not-tax revenue programs.
Resource Allocation	Allocation of resources based on policy decisions, budgeting and budget management.
Professional Management	Promoting efficiency, effectiveness and economy in the management of government programs and services.
Transparency	Making information available to the public about government program planning, administration and expenditure of public funds
Accountability	Eliminating discretionary and arbitrary decision-making.

II. Bolivian and Chilean Experiences with Financial Management Reform

A. Overview

The Bolivian Integrated Administrative Modernization and Management System (*Sistema Integrado de Gestión y Modernización Administrativa*—SIGMA) and the Chilean Integrated Financial Management System (*Sistema de Información para la Gestión Financiera del Estado*—SIGFE) are ongoing IFMS initiatives that are part of a much broader public-sector modernization effort, including civil service reform, decentralization and e-government. Both seek to enhance the efficiency, effectiveness and transparency of government financial management. SIGMA has four general objectives, while SIGFE has six (Table 2).

SIGMA began operation in January 2001. After an early pilot phase with five government institutions, SIGMA has continued to strengthen key characteristics, such as centralized oversight of decentralized operations; single entry of transactions; unified

treasury account,¹ and procedures that define the functions and assign levels of responsibility, accountability and integration. When SIGMA is fully operational (planned for 2005), it will include four components:

- Central SIGMA;
- Local SIGMA for decentralized institutions;
- Municipal SIGMA for 110 municipalities², and
- SIGMA for government entities that administer external debt (*Unidades Ejecutoras de Prestamos Externos*—UEPEX).³

Table 2: General Objectives of the Bolivian and Chilean IFMSs

SIGMA/Bolivia	SIGFE/Chile
<ol style="list-style-type: none"> 1. Promote transparent management of public resources. 2. Provide useful, timely and credible information for decision-makers. 3. Promote efficiency and efficacy in public sector activities. 4. Incorporate and articulate internal controls in the financial system. 	<ol style="list-style-type: none"> 1. Develop a unified information management system. 2. Provide performance indicators, as well as help identify redundancies as well as potential areas of coordination among entities, with similar goals, conducting independent activities 3. Validate transactions; ensure timely single entry of information into the system. 4. Provide analysis of alternative scenarios to support decision-making during financial planning, budget formulation and budget execution. 5. Ensure maximum transparency through the provision of information over the Internet, so that every citizen (as well as authorized personnel based on access levels) may have access to comprehensive information on public services, programs, projects and budgets. 6. Make information available for national accounts, fiscal statistics and any other macro-economic requirements.

Source: SIGMA and SIGFE Documentation, May 2003.

SIGFE also initiated its operations in 2001, with a pilot phase in seven government institutions. SIGFE is characterized by centralized oversight of decentralized operations and single entry transactions. When fully operational (planned for 2005), SIGFE will include and link three main components:

¹ *Cuenta Unica* (CUT) is a unified treasury account, a centralized system for internal control managed by the Treasury, through which all vendors doing business with the government are paid for services rendered and products sold. While public-sector units and decentralized entities retain power to decide how to spend assigned resources, the mandatory use of a single treasury account to pay vendors inhibits corruption by separating the payment function from the decision-to-purchase function.

² Plans call for the SIGMA Municipal system to be implemented by 2005 in at least 30% of Bolivian municipalities. If necessary, different versions of the system will be designed so that it can be adapted to the diverse conditions existing in Bolivian municipalities.

³ For more information on SIGMA/Bolivia, visit: www.sigma.gov.bo.

- Horizontal Systems (basic systems);
- Vertical Systems (complementary systems in governmental institutions), and
- Exogenous Components (external systems such as, procurement, tax collection and investment).

SIGFE is expected to improve the Chilean financial-management information system currently in place by standardizing it, integrating information from government units and connecting those units in real time to improve the flow of information. Moreover, SIGFE will provide substantive information to government managers that will enable them to improve budget formulation and management and develop short-term and long-range strategic plans. With the availability of improved financial management information, Chilean public officials will be able to use the budget process as a planning tool and make budget management an evaluation criterion in personnel performance reviews.⁴

B. Implementation Environment

SIGMA and SIGFE are being implemented in dissimilar political, economic and social environments. (See Table 3 at the end of this section).

Bolivia

Since 1985, the Government of Bolivia (GOB) has achieved substantial progress in the areas of macro-economic stabilization and public sector reform under a series of democratically elected governments. Bolivia began to show positive rates of economic growth starting in the late 1980s, in sharp contrast to the very low increases in per capita Gross Domestic Product (GDP) during the previous half-century.

During the past two decades, the GOB has achieved significant improvements in education levels of the population and social services delivery, although access to services remains uneven. Despite these important advances, Bolivia still lags behind other Latin American nations in critical indicators, such as life expectancy and infant mortality.

Some progress has also been reported at the sector level, particularly in reforms that have enjoyed strong donor support. For example, primary and secondary education reforms, supported by integrated donor projects, have invested in training and, during the last decade, have enjoyed the support of four successive governments. Similarly, GOB health-sector reform is beginning to generate positive results due, substantially, to the use of a new performance-management system.

Some initiatives under justice-sector reform programs have also been considered successful, such as the creation of an Ombudsman (*Defensora del Pueblo*) and implementation of a new penal code (with support from USAID). Customs reform has also been pursued successfully as part of the Bolivian anti-corruption plan.

In 1990, Law 1178 on Financial Management and Control (also known as the *Sistema de Administración, Fiscalización, y Control Gubernamental*—SAFCO) was passed. SAFCO established a set of management systems to replace the tangle of contradictory,

⁴For more in-depth information on SIGFE visit: <http://sigfe.sigfe.cl/>

confusing and obsolete sets of rules that, in the past, had failed to provide direction for public administration.

During the 1990s, implementation of the SAFCO Law was delayed significantly by the GOB's slowness in issuing most of the necessary implementing regulations (*Normas Básicas*) and also by a lack of enforcement institutions. Despite delays in the implementation process, the SAFCO philosophy helped GOB officials move away from a focus on compliance with detailed rules related to bureaucratic procedures, thereby freeing them to concentrate on achieving results.

Throughout the 1990s, the Bolivian economy grew at a steady 4%, thanks in great measure to reforms and foreign investment. But since 2000, economic growth has declined, in part because of the global and regional recession, which has resulted in reduced investment and exports.

In 1999, the GOB adopted a National Integrity Plan (NIP) designed to reduce corruption by introducing a series of reforms related to justice-sector and public-administration modernization and including specific mechanisms to fight corruption. The NIP proposed a medium-term approach to fighting corruption by strengthening public sector institutions to improve performance and accountability. The initiative was centralized in the Office of the Vice-President.

In June 2002, Bolivians elected a new president, Gonzalo Sánchez de Lozada, who vowed to continue the reform process. However, his electoral mandate was weak, given that he received only 22.5% of votes cast. Based on alliances with other political parties, the President's political party enjoyed a narrow majority in Congress. Since the election, the GOB has faced mounting pressure to reduce rising crime and corruption and to implement new economic initiatives using Bolivia's huge natural gas reserves. By February 2003, opposition to President Sánchez de Lozada's administration had intensified and turned violent.

In August 2002, the newly elected government created the Technical Unit against Corruption (*Unidad Técnica de Lucha Contra la Corrupción*—UTCC). In April 2003, as part of an internal reorganization of the Office of the Vice-President, the UTCC became one of four new secretariats. As a result, the UTCC is known today as the Secretariat against Corruption (*Secretaría de Lucha Contra la Corrupción y Políticas Especiales*—SLCC).⁵ Like its predecessor, the SLCC is centralized in the Office of the Vice President, and its main objective is to continue the implementation of the NIP. If fully implemented, the NIP could have a significant impact not only on reducing corruption but also on building robust public sector institutions that contribute positively to poverty reduction and economic development.

Even while Bolivia made significant macro-economic progress and put forward a number of institutional reforms in the last half of the 1990s, little has been sustained. Bolivia's economy is still highly dependent on primary products and its public sector still suffers from lack of organization and the kinds of institutional policies and procedures that facilitate efficient operations. The system is still basically dysfunctional, lacking design coherence and even rudimentary transparency and accountability mechanisms.

⁵For more information on the UTCC and its activities visit: <http://www.slcc.adsib.gov.bo/>.

While in recent years, the GOB, with the support of the international community, has stepped up its efforts to reduce poverty, the World Bank indicates poverty still affects nearly two-thirds of the Bolivian population. Additionally, according to the Transparency International Corruption Perception Index (CPI), Bolivia ranks unfavorably in levels of corruption. In the 2003 survey Bolivia was ranked 106th out of 133 countries surveyed (See Table 3 at the end of this section).

Chile

Chile was one of the earliest Latin American countries to undertake a structural reform program. Beginning in 1974, the country introduced policy reforms related to trade liberalization, monetary and fiscal controls and privatization of banks and parastatals. Building on a foundation laid in the mid-1970s, economic growth accelerated in the mid 1980s. Between 1985 and 2000, GDP grew at an average of about 6.6% per year. It is projected that between 2001-2005, GDP will continue to grow steadily, although at lower rates.

At the same time that Chile strengthened itself economically, it became known as a pioneer in social reform, including the implementation of targeted employment programs and reforms in education and health. This was especially the case after return to democratic government in 1990. Indeed, other countries in the region now see Chile as a model of successful reform. Chile made great strides in the fight against poverty during the 1990s. The three democratic governments elected since 1990 devoted increasing shares of public spending to investments in human capital and social protection, making a concerted effort to increase equity. The combination of targeted social programs with macroeconomic stability and high levels of economic growth helped to reduce poverty. According to the World Bank, the incidence of poverty dropped from 40% in 1987 to 17% in 1998, but it climbed again to 21% in 2000.

During the last three decades, social indicators such as primary-education enrollment, youth literacy, infant mortality and life expectancy also improved in Chile, reaching levels comparable to those of more industrialized countries. On basic health indicators, Chile also scores well internationally. However, some inequalities persist. For example, according to the World Bank and the United Nations Development Programme (UNDP), the infant mortality rate in a poor rural community of southern Chile might be as much as four times greater than the national average and sixteen times that of a prosperous Santiago suburb. The same inequality is found in income distribution.

Solid fiscal management and a deepening of reforms during the 1990s cemented a favorable investment climate and improved the resilience of the economy. Trade liberalization triggered significant export diversification into forestry, fishing, wines, fruits and other agricultural products. As a result, Chile decreased, somewhat, its dependence on revenues from copper exports and its economy grew at unprecedented rates until 1999, when it was slowed by the East Asian financial crisis.

For two decades Chile has used trade as the engine to drive its economy. In the 1980s, unilateral tariff cuts were introduced a policy that was expanded and strengthened during the 1990s. In March 2000, the newly elected president, Ricardo Lagos, made economic recovery a priority for the Government of Chile (GOC), pledging to reduce spending to a level that will produce a budget surplus and allowing the Chilean *peso* to

float, rather than setting exchange rates. In addition, the GOC has continued to open the country's capital markets to increase output and has placed high priority on three key bilateral trade agreements—with the European Union, South Korea and the United States—in hopes that these will help to boost GDP growth.

However, at the end of the decade, economic growth slowed and the economy was performing sluggishly. During 1999-2000, Chile's exports declined and its current-account deficit widened, which forced the Central Bank to raise interest rates, bankrupting many businesses and tipping the economy into recession. Moreover, Chile's dependence on commodity exports made it vulnerable to slower growth—even as exports increased, export earnings decreased.

The GOC is looking to government modernization to help sustain and strengthen economic recovery by improving productivity and increasing access to information. Much attention has focused on modernizing the outdated and rigid public-expenditure management system. Problem areas include: overly decentralized and inadequately integrated financial management systems; gaps in information required for the formulation and management of macroeconomic policy and public investment, and a bureaucratic culture that remains in large part input-driven rather than results-oriented.

Chile fares favorably in international surveys of business competitiveness. For example, the 2002 edition of the Economist Intelligence Unit's e-readiness index, which measures the extent to which a country's business environment is conducive to Internet-based commercial opportunities, ranks Chile 29th out of 60 countries.⁶ Chile also is viewed as having comparatively low levels of corruption, although a series of scandals involving public officials, in 2003, tarnished the country's reputation for financial probity. The GOC is actively engaged in restoring confidence by improving the regulation of financial markets and of public administration.

C. Principal Beneficiaries of SIGMA and SIGFE

SIGMA/Bolivia

GOB agencies that will benefit most directly from SIGMA are the Ministry of Finance, particularly the Directorate of the National General Accounting Office (*Contaduría*), which is responsible for providing official financial information and the Comptroller General's Office, a key control agency. Similarly, most if not all of the public-sector organizations such as ministries, decentralized institutions and their respective administrative units, will benefit directly, as they will be part of a systematic budgetary and accounting process that yields improved and reliable information. When the entire SIGMA is fully operational and integrated with other sub-systems (planned for 2005), other expected benefits could include:

- Strategic planning capacity for public entities.
- Greater decentralization of information and greater centralization of oversight, encouraging real operational decentralization.
- Greater accountability and transparency in the expenditure of funds required by the Heavily Indebted Poor Countries Initiative (HIPC II).

⁶For more information visit: <http://www.eiu.com/>

Table 3: Snapshot of the Bolivian and Chilean IFMS Programs & Selected Comparable Indicators

Variables	Bolivia	Chile
Program Name	<i>Sistema Integrado de Gestión y Modernización Administrativa</i> /Integrated Administrative Modernization and Management System (SIGMA)	<i>Sistema de Información para la Gestión Financiera del Estado</i> /Integrated Financial Management System (SIGFE)
Responsible Agency	Ministry of Finance	Ministry of Finance
Overall/Specific Costs	US\$25-52 million	US\$12-33million
Duration	1999-2005	1999-2005
Main Sources of Funding	Bolivian Government, World Bank and Inter-American Development Bank	Chilean Government and World Bank
Main Beneficiaries	Government agencies and entities at the Central level and 91 municipalities	Government agencies and entities at the Central level
Selected Indicators		
Selected Indicators	Bolivia	Chile
Population (in millions, 2001)*	8.5	15.4
GDP (US\$ billions, 2001)*	8.0	66.5
GDP/capita (in Purchasing Power Parity –PPP rates of exchange, US\$, 2001)**	US\$2,300	US\$9,190
Foreign Direct Investment (US\$ Millions, 2001)*	666	3,045
Human Development Index (value from 0-1)/Rank among 175 countries, 2001**	0.672/114	0.831/43
Poverty (% of population below poverty line, 2002)*	63	17
Telephone Mainlines (per 1,000 people, 2000)**	60	221
Internet Hosts (per 1,000 people, 2000)**	0.2	4.9
Transparency International Corruption Perception Index (10-1)/rank among 133 countries***	2.3/106	7.4/20
World Bank Classification, 2002*	Lower-Middle Income Group	Upper-Middle Income Group
Source: *World Bank, <i>World Development Indicators</i> , 2002. **United Nations Development Program. <i>Human Development Report</i> 2003. ***Transparency International. <i>Corruption Perception Index</i> , 2003.		

- When Municipal SIGMA is fully operational, it will help ensure more effective coordination and supervision by the Bolivian Ministry of Finance and the Comptroller General's Office of public funds administered by municipalities. This should lead to greater accountability in municipal management by providing reliable information about municipal finances not only to officials but also to the public in general.
- Less decision-maker discretion, which will improve accountability.

SIGFE/Chile

In Chile, the most immediate beneficiaries of SIGFE are the Budget Directorate (DI-PRES) of the Ministry of Finance and the Comptroller General's Office, which will be able to access real-time financial information from nearly 300 administrative units of the central government. In addition, a fully operational SIGFE will benefit public sector entities, generally, by promoting:

- Increased effectiveness, efficiency and transparency; clearer missions and improved strategic planning;
- Results-oriented management;
- Improved capacity to respond to national priorities, and
- More rapid and transparent reporting of relevant information.

In addition to the Budget Directorate of the Ministry of Finance and the Comptroller General's Office, five institutions currently involved in SIGFE pilot programs will also be direct beneficiaries—Sub-Secretary of Telecommunication, Health Center *Cordillera*, Directorate of Health Services of *Oriente*, Mobile Information Service of the Ministry of Housing-SERVIU and the police.

As SIGFE is implemented more widely throughout the central administration (2003-2005), other government agencies will benefit as well, as the GOC abandons the practice of using different and often incompatible database management systems. SIGFE, which will support multiple database management systems from different vendors, will combine information from these sources into a single cohesive system and will have the capacity to produce reports at the central, sectoral/ministerial and unit levels.

Two additional beneficiaries of SIGFE will be:

- Chilean citizens, who should benefit from a government that is better managed and more transparent and accountable.
- Investors, who should see a government more responsive to their needs and more supportive of economic development.

Both SIGMA and SIGFE are ongoing initiatives. When fully operational, both also could foster the following benefits throughout their respective governments: (Box 2)

- The ability to track manager responsibility for expenditures, thereby increasing the capacity to investigate and prosecute corrupt behavior;
- Access to timely and accurate information at all levels should improve decision-making, and
- Greater accountability and transparency overall should increase citizen confidence in democratic governance.

Box 2**Benefits of Integrated Financial Management Systems**

Modern integrated financial management can improve accountability by enhancing transparency and oversight in government operations. These systems apply high technology to the fight against financial mismanagement and corruption. Measures to improve financial management systems can involve design of financial software, installation of hardware, and training. Tools for financial management systems can include:

- High-speed computer comparisons of data that can disclose such abuses as duplicate payments to suppliers, double salaried staff, and retirees drawing remuneration;
- Computer-assisted audits allowing selected sampling of activities subject to abuse;
- Automated flash points that call attention to repetitive or inappropriate budgetary maneuvers, or to deviations in areas of high vulnerability;
- General ledger controls over valuable resources such as land, buildings, vehicles, computers, and electronic equipment;
- Single bank accounts used to consolidate public funds and eliminate “off-budget” expenditures.

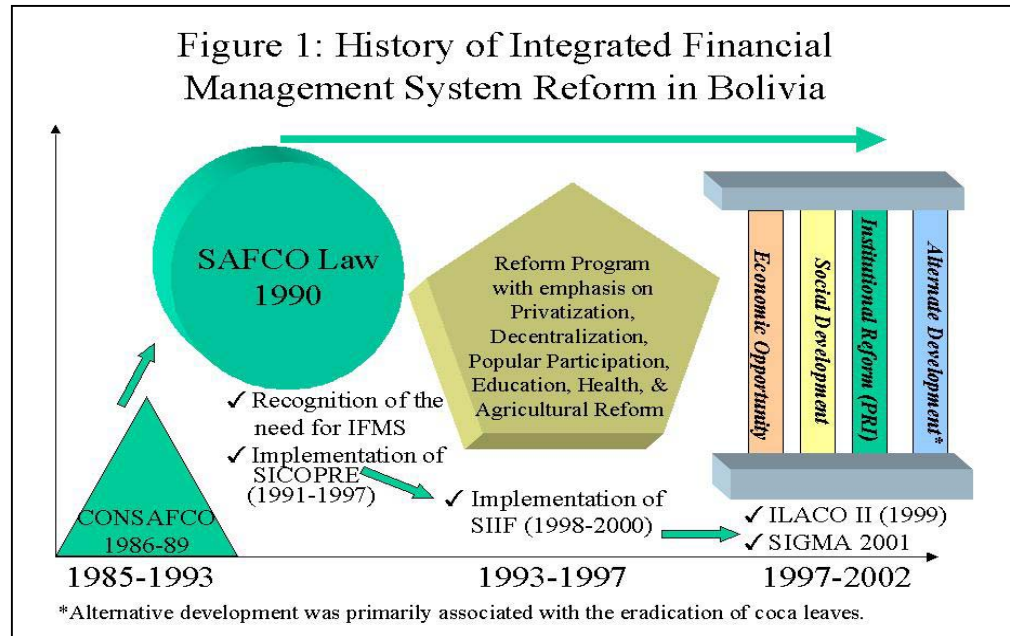
Source: USAID/Center for Democracy and Governance. *A Handbook on Fighting Corruption*. Washington, DC: USAID/CDG, 1999 (pp. 9-10).

III. Implementation Strategy

A. SIGMA (Bolivia)

1. Policy Dialogue

The SIGMA project, the latest in a series of attempts in the last two decades to implement an IFMS in Bolivia, began in 2001, under the direction of the Ministry of Finance, as part of a countrywide integrated strategy to modernize the state (Figure 1). As was noted earlier, the Law of Financial Management and Control (*Sistema de Administración Financiera y Control*—SAFCO), which was passed in 1990, laid out the legal framework for an IFMS framework, although the law did not designate specific technology and software.



Similarly, the New Economic Plan (NEP), implemented between 1985 and 1989 following the most severe economic crisis in Bolivian history, laid out the initial steps for improving financial management, accountability, integrity and transparency. The critical initiative of the NEP was establishing CONSAFCO (*Consejo del Sistema de Administracion Financiera y Control*), an executive level secretariat to manage the design of SAFCO.

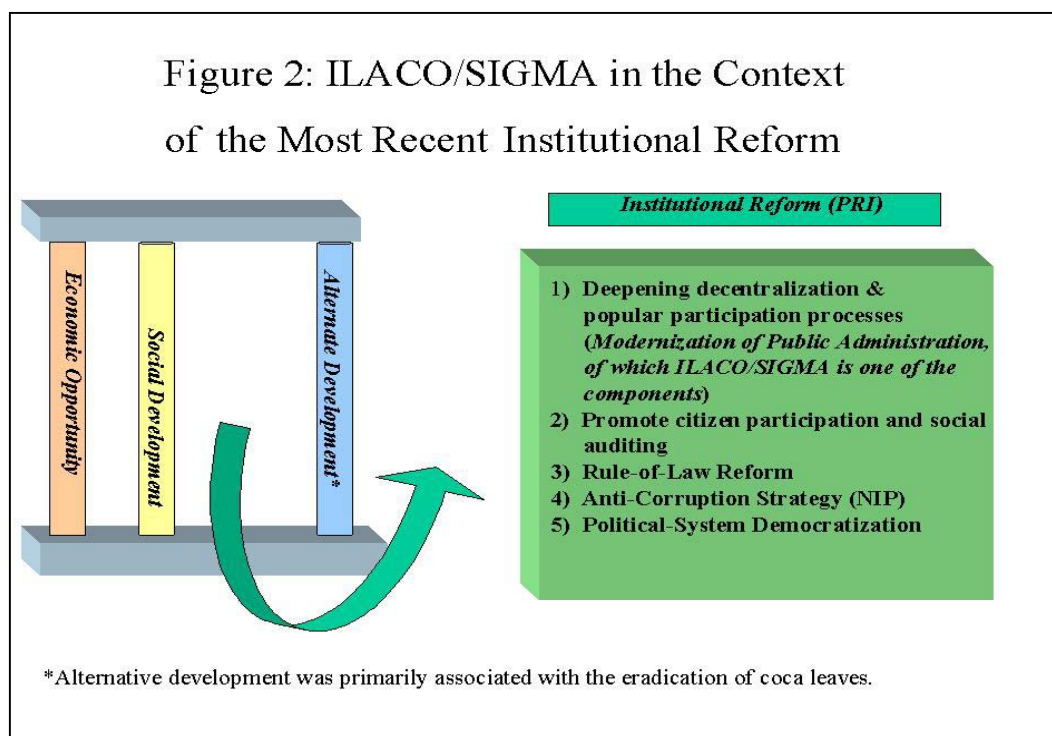
In 1990, SAFCO introduced to the public sector a modern results-oriented management framework. SAFCO would attempt to shape the process of holding public managers accountable for their decisions in order, ultimately, to improve public sector performance. Momentum for implementing SAFCO did not build sufficiently, in part because SAFCO was driven more by the international donor community than by consensus emanating from a national policy dialogue among Bolivian stakeholders. SAFCO implementation first focused on the control function, but was gradually broadened to include all elements of operational programming, execution, accounting and evaluation. The overall goal was to achieve greater efficiency and accountability in management of the state's financial resources.

Between 1990 and 1999, World Bank funding supported a series of attempts to reform financial management. An initial attempt to implement SAFCO was the SICOPRE (Accounting Budgeting System – *Sistema de Control Presupuestario*) implemented by the Ministry of Finance in the early 1990s through 1997. SICOPRE, with internal control and audit reforms implemented by the Office of the Comptroller General, was the first attempt to reform dated accounting, general ledger and budget systems.

The next attempt was the ILACO Project, which was designed to restructure financial administration and control by addressing eight functions⁷, including accounting, which dealt directly with the issue of IFMS. In 1998, in an attempt to improve the performance of SICOPRE, the Integrated System of Financial Information (SIIF) was designed and implemented. It still is in use in some government agencies such as the Superintendency of Securities, the University of Potosi and the Municipality of Cochabamba (Bolivia's third largest city).

In 1997, a newly elected government launched a more comprehensive attempt to modernize the state, which differed from previous efforts by defining a whole new policy approach rather than simply attempting to modify the old system. Government leadership engaged in a National Policy Dialogue that reached out to wide range of stakeholders in and out of government. The result was a strategy that identified four broad goals:

1. Facilitate sustainable economic growth to benefit all economic levels of society;
2. Raise the standard of living of the poor;
3. Modernize government management (See Figure 2 and Box 3 for additional information on the institutional reform efforts); and
4. Identify and support agricultural alternatives for farmers in the coca-growing regions.



⁷ Operations Programming, Administrative Organization, Budgeting, Personnel Management, Acquisitions and Supply Management, Treasury and Public Credit Management, Accounting and Internal Control and Audit. Article 12 of LAW 1178 says, "the accounting system shall integrate all budget, financial and equity transactions in a single, timely and reliable system, which shall be the repository and source of all data expressed in monetary terms."

Box 3

Components and Objectives of the Bolivian Institutional Reform Program (PRI)(1999-2002)

1. **Performance-Oriented Management and Evaluation:** Implement a performance-based management and evaluation system in the Bolivian government, in order to improve the effectiveness and efficiency of resource allocations.
2. **National Integrity and the Fight Against Corruption:** Support a comprehensive effort to develop effective prevention, education and enforcement mechanisms that can be used to fight corruption and promote ethical values in public administration.
3. **Civil Service Reform:** Support creation, in the central government, of a new professional civil service that operates under the merit principle. This is the glue that will hold the PRI together. Civil-service reform will ensure that public servants are recruited according to their professional profile and experience, thus reducing political party influence over public sector administration. By adopting the Civil Service Statute (*Estatuto del Funcionario Publico*) and building a central civil service system, this component will set the stage for viable administrative careers within Bolivia's public sector.
4. **Organizational Reform:** Financially and strategically, this is the most important component of the PRI. Its objective is to restructure agencies while improving their capacity for service delivery based on results. There are nine sub-components in the organizational reform, including customs, tax and Ministry of Housing.
5. **Reform Management:** A Technical Unit is responsible for management of the overall implementation of the PRI. The reform management component operates at two levels—the national and the international donor.

Source: From The World Bank. *Bolivia: From Patronage to a Professional State/Bolivia Institutional and Governance Review*. Washington, D.C., 2002.

Beginning in 1999, the World Bank began funding ILACO II, the implementation of SIGMA in a number of units in the central administration. SIGMA is the latest IFMS initiative in Bolivia, developed to replace the SIIF. However, the SIIF is still in operation in some Bolivian GOB units. Nevertheless, representatives of SIGMA are optimistic that an overwhelming majority of Bolivian public entities (centralized and decentralized) will be linked to SIGMA by the end of 2005.

Since 2002, the framework for institutional reform in Bolivia has not been clearly defined. Although SIGMA is not an integral part of any new reform initiative, the government elected in 2002 is fully committed to SIGMA and to fulfilling its commitment to the World Bank. SIGMA users and stakeholders widely perceive it as an instrument that will improve internal control, reduce decision-maker discretion and

promote transparency. Nonetheless, the SIGMA implementation process remains complex, fragmented and slow.

2. Legal Framework

The principal legal instrument for government modernization in Bolivia is the SAFCO Law. The minimum requirement for SAFCO's implementation was the approval of the Basic Norms and subsequent adoption of policies and procedures by all public agencies. However, issuance of secondary regulations and agency-level application of the SAFCO systems lagged. It was not until 1997, under considerable pressure from the donor community, that all the Basic Norms were issued. In the last few years more progress has been made in developing agency regulations.

Reacting to strong donor pressure, the Ministry of Finance required central government agencies to introduce SIGMA. To support this mandate, in 2000 the GOB issued Supreme Decree No. 25875 formalizing SIGMA and in 2001 Supreme Decree 26455, assigning responsibility for the adoption and management of SIGMA. This was the first time in 17 years that the government issued a specific legal instrument supporting the implementation of an IFMS. The Ministry of Finance has used these legal instruments to compel government institutions to subscribe to SIGMA.

3. Program Financing

According to the World Bank, Bolivia is the second largest recipient of Official Development Assistance (ODA) in the Latin American and Caribbean Region (LAC), averaging close to US\$80 per capita over the past decade. ODA has grown from \$498 million in 1989, (11% of GDP) to \$569 million (7% of GDP) in 1999. Donor technical assistance has been consistent during the last decade, although its emphasis has shifted. For example, between 1985 and 1989 most ODA was directed towards macroeconomic stabilization activities. Between 1993 and 1997, ODA supported intensive institutional reform activities in areas such as education, decentralization, citizen participation and judicial reform. Technical cooperation peaked during this period.

Between 1997 and 2002, the GOB entered into HIPC-II agreements and adopted an integrated four-pillar government strategy that established a new framework for donor assistance, focusing on policy dialogue and long-term planning. In 2003, the financial prospects for Bolivia are more limited, as the International Monetary Fund (IMF) has advised the government to reduce its growing deficit. This could have an adverse effect on SIGMA program funding.

IFMS initiatives in Bolivia have been supported by successive World Bank projects. The first phase was financed through the International Development Association (IDA), the World Bank Group's concessional lending instrument for nine countries of the LAC Region. Initially, IDA disbursed \$15 million to support GOB modernization of public-financial and budget-reporting systems to ensure accountability at the decentralized level and transparency in the use and expenditure of public funds.

In 1999, the World Bank approved the ILACO II project that supported the institutional reform program. This was a \$32-million program, of which approximately \$7 million was designated for SIGMA activities. In addition, the IDB in 2001 approved a loan for \$20 million to support the Municipal Financial Management Modernization Program, which basically extends the scope of SIGMA to the municipal level. GOB officials plan to implement SIGMA in nearly 30% of Bolivian municipalities. This funding is also supporting the government economic program agreed upon with the IMF with regard to structural fiscal reforms, since SIGMA implementation constitutes a structural adjustment indicator.

4. Other Implementation Issues

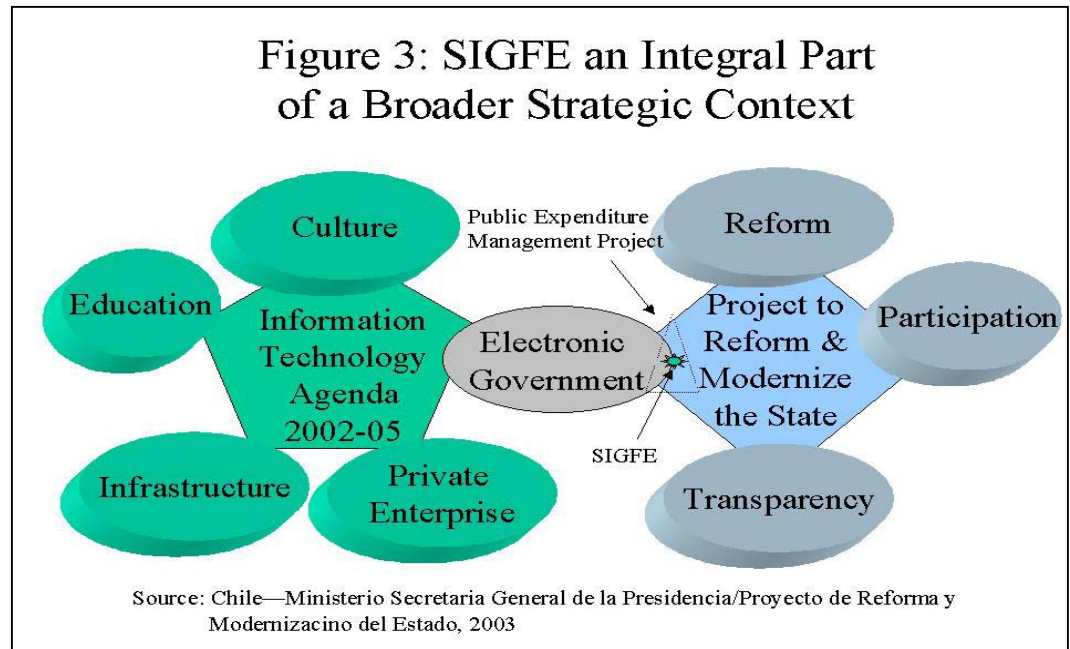
Bolivian reforms that have taken place, including SIGMA, would not have occurred without the strong encouragement of international donors. Recently the government has restated its commitment to IFMS implementation, as evidenced by the enactment of Supreme Decree 25875 (2000).

In reality, weak institutional frameworks, politicization and a plethora of ineffective and conflicting administrative policies and procedures have hampered the implementation of initiatives such as SIGMA. Furthermore, a succession of attempted reforms that have failed to take hold, such as SICOPRE, SIIF and even SIGMA, have suffered from poor inter-governmental coordination, overemphasis on technical issues, political interference and insufficient attention to communications strategies to keep the public and decision makers informed about activities and accomplishments, to build support for the programs.

In 2003, SIGMA is being implemented by a Project Implementation Unit (PIU) that reports directly to the Minister of Finance, although the PIU is not a formal component of the organizational structure of the ministry. The PIU has a staff of more than 100 organized into four activity areas: conceptualization, systems, implementation and training. The PIU regularly utilizes international consultants who provide advice on highly technical matters including satellite technology and the Oracle software platform. Eventually, SIGMA will be transferred to the General Directorate of Accounting (*Contaduría*), under the Vice Ministry of Budget and Accounting.

Five core areas will have to be addressed as the GOB considers how to make SIGMA sustainable:

- Human resources (training of operators and users);
- Technology (upgrades, licensing and maintenance costs);
- Norms and regulations (optimize policies and procedures and amend, fine-tune legal framework);
- Monitoring and evaluation (assess the effectiveness of incentives and adaptation of existing systems to the new one; audit the system and evaluate its impact), and
- Institutions (where is the system located, institutional ownership and local capacity to absorb SIGMA).



Last but not least, there is the issue of linkages and integration with other systems. Since 2001, SIGMA's design strategy has focused on the implementation of Central SIGMA. As a result, the development and implementation of interfaces is lagging. Similarly, strategic linkages have not been made with other ongoing initiatives, which are part of the effort to develop electronic government (e-government).

B. SIGFE (Chile)

1. Policy Dialogue

SIGFE, being implemented by the Ministry of Finance's Budget Directorate (DIPRES) in close collaboration with the Comptroller General's Office, is a key component of the overall plan to modernize the state entitled, the *Proyecto de Reforma y Modernización del Estado* (PRYME), which began in 2000 as a comprehensive, long-term initiative. SIGFE is also linked to Chile's Information Technologies policy agenda (Figure 3) and is one of five components of the Public Expenditure Management Project (PEMP), being financed by the World Bank.

Moreover, in the Chilean Electronic Government Policy Agenda (2002-2005), SIGFE is one of more than 260 projects supporting the goals of the e-government agenda. These government initiatives have been part of a policy dialogue involving stakeholders from the government, the opposition, the private sector and civil society.⁸

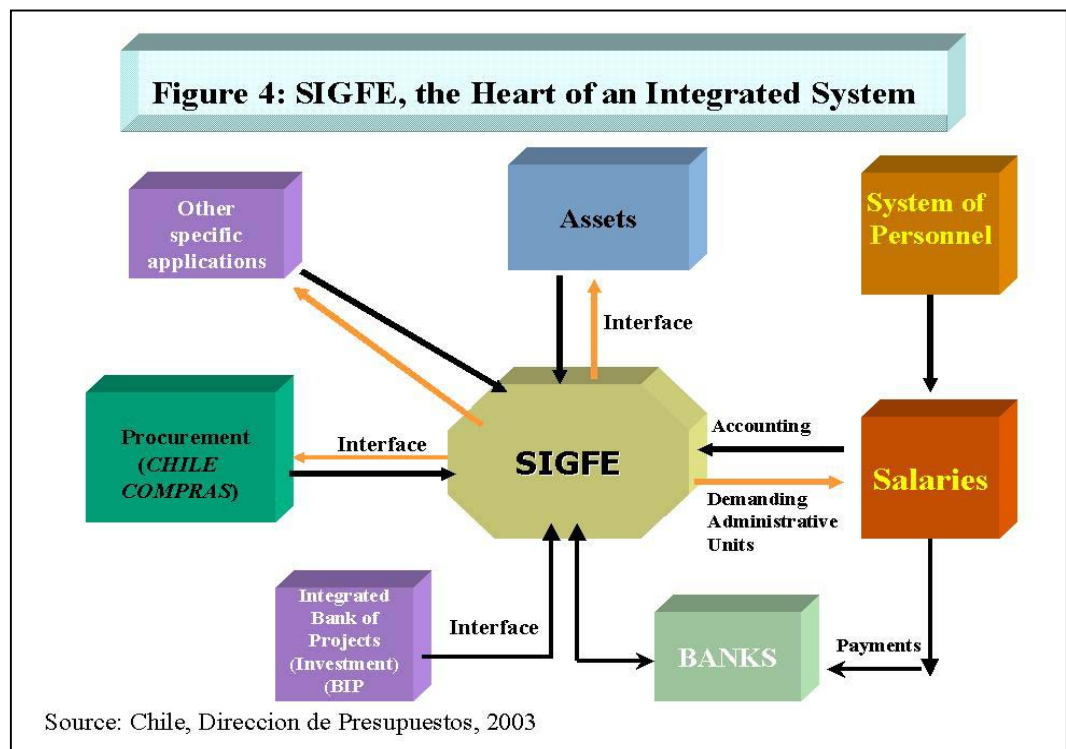
Both PRYME and the Chilean Electronic Government Policy Agenda share the same set of principles. The PRYME's ultimate goal is a public sector with capacity to serve citizens in a more effective, transparent and participatory manner. The

⁸ For example on January 20, 2003, the government of Ricardo Lagos signed a Consensus Agreement with opposition political parties that included the PRMYE agenda.

goals of the Electronic Government Policy Agenda are to have a major impact on public sector transparency; promote broad citizen access to the information available through these technologies; improve client and user services and improve interaction and relations between government and citizens.

A successful SIGFE is integral to achieving the above objectives because it underpins implementation of a new IFMS, by updating the legal framework, policies, procedures and systems in order to modernize government management. The influence of SIGFE potentially could be considerable since the plan is to implement the system in all ministries and other central government units. When fully operational in 2005, SIGFE and its interfaces and linkages (Figure 4) should bring greater government accountability, transparency and efficiency, the saving of public funds, better allocation of resources and improvements in the budget planning and execution processes.

SIGFE also will support the e-government initiative by producing timely and reliable information about government expenditures. Budget development will be more reliable and the tracking of expenditures more accurate. With more quality information available, Congress will be better able to exercise its oversight role and should become more of a partner in governance. Because the Finance Ministry plans to publish key reports on the government Intranet and on public websites, citizens, journalists and other stakeholders will be better informed and transparency and accountability should increase. (Figure 4)



2. Legal Framework

The PRYME and e-government initiatives are considered catalysts for public sector modernization and subsequent improvement in government service delivery. The comprehensive nature of the PRYME and the e-government strategy has also provided the SIGFE project with the policy support and legal instruments necessary for it to succeed.

During the last decade, the GOC has emphasized continuity in policy reform, cautiously targeting key sectors and agencies. Moreover, for both the PRYME and e-government strategy, the government has created an environment of consensus, where inclusive policy dialogue and facilitating political agreements have been pursued, including:

- Inter-Ministerial Commission for State Modernization (1994);
- National Commission on Public Ethics (1994);
- General Governmental Internal Auditing Commission (1997);
- Creation of the Public Ministry (1997);
- Agreement between the National Association of Public Employees (ANEF) and the GOC (1997);
- Commission for New Information and Communication Technologies (1998);
- Program to Improve Public Administration (PMG, Law No. 19553);
- Ministerial Committee for State Reform (2000);
- The Political and Policy Agreement between the Executive and Legislative Branches of Government to Modernize the State, Transparency and Growth (2003).

Because these legal and policy initiatives have an indirect link to SIGFE's implementation, they have created the necessary macro-legal and policy frameworks for SIGFE and other similar programs. (See Box 4 for other examples of legal and policy initiatives that created an enabling environment for SIGFE and other reforms.)

Box 4**Selected Legal and Policy Initiatives that Created an Enabling Environment for SIGFE**

- Program to Evaluate Government Projects (1997).
- Program to Simplify Government Procedures (1999), Presidential Instructive No. 41.
- Information and Complaint Offices in all public offices.
- Various initiatives to promote decentralization (Constitutional reform of 1991, which gave birth to regional governments; Law No.19602 of 1999, promoting citizen participation; Program to Strengthen Municipal Institutions (PROFIN); National Municipal Information System (SINIM).
- E-government Program 2001 (Presidential Instructive No. 905).
- A new governmental website, www.tramitefacil.gov.cl, inaugurated in 2001 to facilitate information flows to citizens on more than 1,400 public services, administrative procedures and documents, such as taxes, scholarships, health and security.
- The Program to Reform the Procurement and Contracting Process in the Public Sector (Law No. 1312) www.compraschile.cl (The website provides information on 120 services).
- Single portal website for information about Chile's public sector. (<http://www.gobiernodechile.cl/>).
- Posting of the national budget and reports on public finances are posted on a website where they are available to the public with information on results and indicators. www.dipres.cl.
- A comprehensive agenda for e-governance, covering 2002-2005, with 262 projects, of which SIGFE is one. www.modernizacion.cl.
- National System of Territorial Information/SNIT, by Presidential Instructive No. 14 2001.

Source: Chile, Ministerio Secretaria General de la Presidencia/Proyecto de Reforma y Modernización del Estado, 2003. Visit http://www.modernizacion.cl/index_legislacion.htm for more information on the legislative framework.

3. Program Financing

SIGFE implementation began in earnest in 1999, with a diagnostic component and the design of an information-system model, which was pre-tested in 2000. In 2002, the GOC signed a loan agreement with the World Bank for the PEMP project; implementation began shortly thereafter. The World Bank and the GOC are financing SIGFE and the other four components of the PEMP. Of the \$12 million cost for SIGFE, the World Bank is financing 75% (\$9 million).⁹ In 2002, the GOC earmarked close to \$3 million to support SIGFE activities.

⁹ The World Bank. "Project Appraisal Document on a Proposed Loan in the Amount of US\$23 Million to the Republic of Chile for a Public Expenditure Management Project," January 22, 2002.

4. Other Implementation Issues

The GOC has created a Project Coordinating Unit (PCU) in the Ministry of Finance Budget Directorate (DIPRES), which is responsible for implementing SIGFE. A project director has a project team comprised of about 40 staff organized into three key working groups—financial, systems and implementation. In 2003, the PCU implementation unit will be strengthened with an additional 30 staff to handle the implementation process in nearly 70 new government entities.

During the first phase of implementation, which ends in 2005, the PCU is responsible for four key activities:

- Preparation of the SIGFE normative and institutional framework;
- Implementation of SIGFE in five pilot public institutions;
- Subsequent implementation of SIGFE in 22 public units; and
- Full operation of SIGFE by 2005, in 180 governmental units.

To date, the PCU has not required the services of international experts. In fact, a unique feature of SIGFE is that employees of the PCU have managed nearly all its technical components. In addition, the PCU is administering procurement and expenditures related to contracting of consultants, payment of salaries and the acquisition of goods and equipment required by the project.

Despite the fact that, since 2000, the scope of the agenda has been scaled back, modernization of the state continues to be a central theme of the GOC. Significant stakeholders of the SIGFE initiative are the GOC as a whole, the Ministry of Finance's Budget Directorate and, in particular, key technical personnel from the PCU.

SIGFE and other sectoral programs of the GOC e-government agenda are seen as critical components, notably public procurement (*Chile Compra*) and electronic-transaction processing, including tax payments. Concern for internal control, transparency and accountability is also apparent, particularly in support for measures to strengthen the Auditor General's Office. During this phase of implementation, which is scheduled to end in 2005, SIGFE does not contemplate incorporating municipalities into the system, but SIGFE will be tested in a couple of regional governments.

IV. Present Status

Both SIGMA and SIGFE are at critical junctures. By the end of 2003, SIGMA is attempting to incorporate 10 more municipalities and three regional governments (*Prefecturas*) into the system. By the end of 2003, SIGFE intends to expand its coverage by incorporating 70 central governmental institutions involving 118 programs of the 2003 Budget Law or 40% of the total budget.

A. SIGMA (Bolivia)

In May 2003, SIGMA began operating in 24 entities of the central government, involving more than 200 administrative units and nearly 400 implementing units. It was also operating in 16 decentralized units, such as the General Superintendencey (SIRESE), and in one municipality (La Paz). By the end of 2003, SIGMA plans to incorporate

seven large municipalities, three medium municipalities and three regional governments. Between 2004-2005, SIGMA will incorporate 100 small and medium municipalities, the judicial branch and the remaining six regional governments. By 2005, if current goals are achieved, SIGMA will have integrated nearly 90% of the national budget activity into its system.

A major accomplishment of SIGMA has been the launching of the Unified Treasury Account (*Cuenta Unica del Tesoro*—CUT), which permits electronic payments and transfers, thus eliminating the burden of having to write checks and the corresponding written and paper authorizations. Since 2000, CUT has processed more 160,000 electronic payments, made more than 1,300 purchases and processed nearly 1,200 payrolls. Some 6,500 vendors are registered with the system.

SIGMA is widely perceived by users and stakeholders as an effective instrument for improving control, reducing decision-maker discretion and increasing transparency. Nonetheless, at this juncture, SIGMA faces a number of challenges, including:

- There is a need to complete the development of SIGMA as it was conceptualized, if it is to be a fully integrated and modern administrative system. As of May 2003, only the Central SIGMA (budgeting, treasury, public debt and accounting) had been fully developed. The other three components—Local SIGMA, Municipal SIGMA and UEPX SIGMA (which includes procurement, human resources, revenue collection and assets management systems)—are in different stages of development and implementation. Creation and application of interfaces is behind schedule.
- SIGMA needs to adapt to the context in which it is being applied (both technologically and in terms of implementation approach) and to consider the specific circumstances, diverse realities and needs of targeted entities, such as municipalities, superintendencies and regional governments. This is a key issue, given the disparities in institutional capacity between and within public institutions.
- Municipal SIGMA is perceived to be too costly and ambitious, in terms of maintaining fiber optics networks, satellite connectivity and licenses and upgrades. Introducing technology that is inappropriate for current capacity hinders institutional development. Similarly, technical assistance from SIGMA should be tailored to the unique needs of municipalities, superintendencies and regional governments. The SINCOM (*Sistema Integrado de Contabilidad Presupuestaria*), a less costly and more adaptable IFMS, is currently being used by more than 70% of Bolivian municipalities.
- SIGMA currently lacks an adequate institutional framework (i.e., Institutional Reform Program, state reform/modernization program), at both the national and municipal levels. It lacks reciprocal and complementary interaction with other initiatives that are being carried out, such as investment management, procurement and tax collection.
- At this stage, the Ministry of Finance does not have a strategy for the eventual transition of the project into the General Directorate of Accounting (*Contaduría*).

It is unclear how the *Contaduría* will be able to absorb the day-to-day operating cost of SIGMA when the donor-funded project ends in 2005. Gradual incorporation of SIGMA activities and expertise into a permanent central governmental unit is necessary to ensure its effectiveness and sustainability.

- Many laws, regulations and bureaucratic practices in numerous government organizations have not been adapted for SIGMA and vice versa.
- SIGMA needs to design a comprehensive sustainability strategy.

B. SIGFE (Chile)

In May 2003, SIGFE was fully operational in seven entities of the central government and was being consolidated in 22 more. By the end of 2003, SIGFE plans to be fully operational in 70 entities of the central government, covering 118 program activities of the 2003 Budget Law. This would represent 40% of the national budget activity. By 2004, the plan is for SIGFE to double its effort and include more than 100 central-government institutions incorporating more than 300 implementing units.

SIGFE is an activity promoted almost entirely by country nationals, with a unique sense of ownership, who believe it is central to the plan to modernize the state (PRYME) and the GOC's information-technology policy agenda.

Like its counterpart in Bolivia, SIGFE is widely perceived by users and stakeholders as an useful instrument for improving internal control, diminishing decision-maker discretion and increasing accountability and transparency. It is seen as a technologically advanced tool integral to the state modernization program. One key accomplishment of SIGFE is its software design, which allows for parameterization¹⁰, making SIGFE adaptable to a range of existing institutional transactions and needs. Nonetheless, at this juncture, it also faces a number of challenges:

- SIGFE considers itself the heart of a broader information-management system, yet it still lacks a clear strategy to link itself with other components. The development of SIGFE, as it was originally conceived, must be completed if it is to achieve its goal of being a fully integrated system.
- To build a support constituency, there is a need to publicize the benefits and accomplishments of SIGFE, as well as explain and present to beneficiaries the implementation plan, results already achieved and expected future results.
- Until now, the SIGFE has developed the basic systems (Horizontal Systems) and has focused mainly on technical issues. As implementation expands (connection with Vertical Systems and Exogenous Systems), SIGFE must build strategic alliances with other government entities, as well as with other constituencies to strengthen political support.
- The growing recognition of IFMS as a tool for sound financial management and good governance has prompted many GOC institutions to adopt and implement

¹⁰ "Parameterization" refers to the capacity of the primary software to adapt an array of existing functions to current requirements. It adjusts to the organization's needs, rather than the converse.

other systems, at the same time that SIGFE is planning to expand its scope. SIGFE should provide a schedule as to how and when interfacing, incorporation or replacement will take place, to reduce needless expenditures by other government agencies.

V. Lessons Learned

A. Strategic Approach

1. IFMS reform must be part of a well-defined, integrated, interrelated and interactive state modernization strategy.
2. Continuous dialogue and consensus building with all relevant stakeholders helps to generate support (political will) for IFMS and build ownership. It also improves coordination in support of implementation.
3. IFMS implementation strategy should be linked to anti-corruption (transparency and accountability) programs. By increasing government transparency, accountability and efficiency, IFMS responds to citizens' desire for responsive government.
4. IFMS implementation must be staged, with the new system being tested in pilot agencies so that results can be evaluated and changes made where needed. When satisfactory outcomes are achieved, the system can be expanded horizontally and vertically to other government units.
5. Particular emphasis must be given to publicizing the benefits of IFMS, in order to consolidate understanding of it and build support constituencies in government, civil society and the private sector. Such a far-reaching reform requires broad and strong political backing, beyond the institutions that are driving the process. Thus, a communications plan is just as important as any other element of the IFMS implementation strategy.
6. The implementation strategy for a new IFMS must take into account pre-existing systems and schedule interface, incorporation or replacement as appropriate. The approach should be comprehensive and take into account the entire institutional and legal environment so that each targeted government entity can lay the appropriate groundwork for inclusion in IFMS.
7. IFMS should be designed to have sufficient flexibility to be responsive to different institutional needs at the national and sub-national levels, as well as to institutional changes.
8. The IFMS implementation approach must include a comprehensive sustainability strategy, addressing five core areas:
 - Human resources—training for operators and users;
 - Technology—upgrades, licensing and maintenance costs;
 - Norms and Regulations—to facilitate bureaucratic cooperation by amending, fine tuning and effectively articulating laws and norms;
 - Monitoring and Evaluation—ongoing assessment of progress and impact enables mid-course adjustments and fine tuning, as needed. It also enables the

trumpeting of interim achievements strengthening the hand of IFMS proponents, and

- Institutions—IFMS installation timeframes should be developed based on a government unit's greatest need for the system, greatest impact on overall government operations and expressed support for the system by high-ranking officials of the government unit. By doing so, early successes are more likely to be achieved, leading to stronger support for the system throughout government.

B. Environment

1. A basic legal framework in support of IFMS is necessary but, by itself, is not sufficient to guarantee positive results. Officials, carefully selected, with the power and capacity to carry out implementation and operations are equally important.
2. When there is a coherent legal and policy framework that explicitly recognizes IFMS as an essential tool for state modernization, it is more likely that IFMS will be implemented regardless of political, economic and leadership changes.
3. Explicit and continuous advocacy of the value of IFMS to government administration legitimizes it and educates stakeholders about its potential. Early successes should be publicized and benefits explained.
4. Coordination with other government reform initiatives—such as e-government, procurement, civil service, tax collection, public investment—is essential to long-term success.
5. The design and implementation processes must have strong, competent leadership, in both technical and political dimensions, for the promotion of IFMS and for its integration with the overall reform process. Lack of promotion and linkages makes IFMS vulnerable to critics.
6. Consistent and reliable availability of financial resources is vital to the entire IFMS cycle (design, implementation, evaluation and maintenance).
7. IFMS, like any reform initiative, requires stable social, political and economic conditions for adequate implementation and to achieve high-impact and sustainable results.

C. Implementation and Results

1. IFMS must result in more efficient, effective, transparent and accountable governance, otherwise it loses credibility and, ultimately, support.
2. Results-oriented management is more likely to result if IFMS involves normative centralization and operative decentralization and has a strong focus on promoting accountability, human-resource skills building and transparency.
3. Building an ever-expanding cadre of technical personnel with the technical skills to manage implementation and development of IFMS and deal with new paradigms, contributes to sustainability. IFMS should be designed so that the knowledge for operating it is gradually transferred and institutionalized in the government units responsible for its maintenance and improvement.
4. In order to measure IFMS overall impact, a regular and comprehensive monitoring and evaluation effort, including development and usage of indicators, must accompany all phases of implementation.

5. The IFMS implementation process and the achievement of results are affected greatly by institutional factors—sequence of reforms, absence/presence of a reform framework, policy continuity/discontinuity, skill levels, training and cultural variables. Therefore, close monitoring of implementation in each government unit is crucial.

D. Actors and Stakeholders

1. Ownership by managerial, coordinating and technical personnel and national and sub-national officials is important to overall success and sustainability, as it reduces potential resistance and increases understanding.
2. Successful implementation of IFMS requires that the primary stakeholders and promoters be nationals of the country involved. This generates local ownership and commitment and reduces perceptions that international influences are driving IFMS activity.
3. While donor support is vital, particularly in the early phases of implementation, interaction with donors must be strategic and selective to prevent the perception of donor domination. IFMS initiatives should be demand-driven and not supply-driven.
4. Donors risk achieving mediocre results if they insist on IFMS reform when national, ministerial and municipal stakeholders' ownership is weak.
5. Multiple donors supporting IFMS activities in a country must coordinate efforts to avoid duplication and achieve integrated rather than splintered results.
6. Governments should engage civil society in IFMS reforms. If made a partner in the process, CSOs can play an important role in educating the public about the need for and potential results of IFMS relative to improving service delivery and increasing government accountability and transparency.

E. Software Applications

1. IFMS software and hardware platforms should be sustainable within the country and, where possible, built on systems already in place.
2. Outdated and obsolete software and hardware should be retired gradually and its main programs migrated to the new platform. System planners must have a well-thought-out plan for realizing this complex task.
3. Central government IFMS implementation should not routinely discard existing local-government systems that are producing desired results, but should consider incorporating existing systems into the IFMS framework.
4. Government personnel do not automatically embrace new sophisticated software applications. Conversely, systems developed in-house, while more affordable can be inferior and may not have sufficient internal controls.
5. Ultimately, the effectiveness of IFMS as a financial management tool is dependent on the ability to finance and capacity to maintain and upgrade appropriate technology. If either is lacking, IFMS will not provide useful and timely information to decision makers.
6. Software that absorbs and adapts an array of existing functions to current requirements (parameterization) can reduce costs, speed implementation and attract support for the overall effort.

Annex 1: Snapshot of the Bolivian and Chilean IFMS Programs & Selected Characteristics		
Variables	Bolivia	Chile
Program Name	<i>Sistema Integrado de Gestión y Modernización Administrativa</i> /Integrated Administrative Modernization and Management System (SIGMA)	<i>Sistema de Información para la Gestión Financiera del Estado</i> /Integrated Financial Management System (SIGFE)
Responsible Agency	Ministry of Finance	Ministry of Finance
Host Entity	General Directorate of Accounting (<i>Contaduría</i>)	Budget Directorate (DIPRES)
Current Size of PCU/PIU	Over 100	Over 70
Project Duration	Until 2005	Until 2005
Coverage	Central government entities, decentralized public entities and 30% of municipalities	Central Government entities
Software Technology	Oracle Software	MS Platform with software licensing (not commercial)
Source of Connectivity	Intranet based for central and decentralized government entities and larger municipalities, and microwave and satellite for the medium and smaller municipalities	Web based
Main Functions	Budgeting, accounting, cash management and debt management, with planned interfaces to human resource management, procurement, investment and assets management—real time	Budgeting, accounting, cash management, with planned interfaces to personnel, procurement, investment and assets (on real time)
Scope	When fully operational in 2005, 89% of budget activity	When fully operational in 2005, 80% of budget activity
Current Use	Limited, with parallel systems in operation	Limited, with parallel systems in operation

Annex 2: List of Interviewees

CHILE

Thomas D. Mittnacht

First Secretary
U.S. Embassy

Greg Wells

Office of Democratic Development
U.S. Embassy

Roberto Cerri

Director
SIGFE Project Coordination Unit
Ministry of Finance

Leonardo Sánchez González

Financial Coordinator
SIGFE Project Coordination Unit
Ministry of Finance

Alvaro Torres Navarro

Information Technology Coordinator
SIGFE Project Coordination Unit
Ministry of Finance

Hector Espinoza Villares

Implementation Coordinator
SIGFE Project Coordination Unit
Ministry of Finance

Domingo Frez de Negri

Information Technology Coordinator
Coordination Unit of the SIGFE Project
Ministry of Finance

Antonio Lupayante-Salinas

Financial Consultant for Implementation
SIGFE Project
Ministry of Finance

Noemí Rojas Llanos

Vice Comptroller
Comptroller General's Office

BOLIVIA

Todd D. Sloan, Jr.

Director
Democratic Development Office
USAID

F. Michael Willis

Deputy Director
Office of Democratic Development
USAID

Marcelo Berthin

National Audit Officer
USAID

Maggie Morales

National Legislative Officer
USAID

Javier Comboni

Minister of Finance
Ministry of Finance

René Ferrufino

Vice Minister of Budgeting
Ministry of Finance

Mario Costas

Director General
Accounting Office
Ministry of Finance

Carmen Zuleta

Technical Director
ILACO II Project/SIGMA
Ministry of Finance

Arturo Espinoza del Carpio

Training Division
ILACO II Project/SIGMA
Ministry of Finance

CHILE

Pedro Ortiz Gálvez

Chief of the Accounting Division
Comptroller General's Office

Luis Téllez

SIGFE Coordinator
Comptroller General's Office

Rebeca Oyaneder Riquelme

General Audit Council of the Government

Joanna Zamora Sepulveda

Consejo de Auditoria General de Gobierno
General Audit Council of the Government

Cesar Ladrón de Guevara Pardo

Reform and Modernization of the State
Project
Ministry General Secretariat of the Presidency/
Tramites Fáciles

Mónica Menares Hurtubia

Reform and Modernization of the State
Project
General Secretariat of the Presidency—
Tramites Fáciles

Jorge Chateau Herrera

Coordinator
Reform and Modernization of the State
Project
General Secretariat of the Presidency

Angel Flifish Fernández

Executive Director
Reform and Modernization of the State
Project
General Secretariat of the Presidency

Patricio Gutiérrez González

E-Government Coordinator
Ministry of Finance

BOLIVIA

Marcia Pomier Pérez

Training Division
ILACO II Project/SIGMA
Ministry of Finance

Lupe Cajías

Director
Technical Unit to Fight Corruption
Vice-Presidency

Ivette Lastra Morales

Vice-Comptroller of External Auditing
Comptroller General's Office

Javier Revollo

Director of Financial Programming
National Treasury Office

Patricia Alborta

Consultant on Public Administration
World Bank

Claude Besse Arze

Superintendent General
Sectoral Regulation System (SIRESE)

Luis Fernando Salinas

Economics Technical Director
General Superintendencey

Walter Guevara

Superintendent General
Civil Service System

Jaime Larrazábal

Administrative Director
Superintendency of Telecommunications

Mauricio LeaPlaza Peláez

Executive Secretary
Municipal Government of La Paz

Miguel Angel Tellería

SIGMA Project Coordinator
Municipal Government of La Paz

CHILE

Raúl Ampuero

Chief
Regional Strengthening Department
Ministry of Interior

Pilar Contreras García

Chief
Investment Department
Ministry of Planning and Cooperation

Domingo Antonio Cid Miranda

Coordinator
Integrated Database of Projects
Ministry of Planning and Cooperation

Jorge Olivares Beltrán

Chief
Finance Department
Telecommunications Sub secretary

Daniel Cortés Espinosa

Chief
Administrative and Finance Division
Telecommunications Sub secretary

Francisca Artaza

Directorate Advisor
Chile E-Procurement

Carmen Gloria Ravanal

Chief of Planning
Chile e-procurement

Jaime Tarud Rodway

Management Adviser
Ministry of Housing and Urbanization

Arturo R. Catalán A

Journalist
El Mercurio Newspaper

Juan Enrique Alvarez

Deputy Administrative Director
Cordillera Health Referral Center

BOLIVIA

Sonia Leytón

Chief Administrative and Financial Officer
Municipal Government of El Alto

Jaime Arcani

Municipal Council President
Municipal Government of Viacha

Abraham Aruni

Chief Financial Officer
Municipal Government of Viacha

María Victoria Pascual

Director
Municipal Network

Rafael Velázquez Ramírez

Manager
Strengthening to the Associative System
Municipal Network

Dino Palacios Dávalos

Manager
Strengthening to the Associative System
Municipal Network

Michael John Bennett

President
Federation of the Municipal Associations
of Bolivia

Marco Camacho Peña

Executive Director
National
National Fund for Productive and Social
Investment

Marianela Anza

Chief Financial and Administrative Officer
National Fund for Productive and Social
Investment

BOLIVIA

Eda Alcócer

Chief of Control and Administration
National Fund for Productive and Social
Investment

Marcelo Vásquez Barrera

Deputy
House of Representatives

Susana Vedia

Major Officer
House of Representatives

Alfonso García Salues

Decentralization and Institutional Development Adviser
Dutch Embassy

Carol Orozco

Financial Officer
Unified Funds Directorate (DUF)

Marcelo Montalvo

Director
Fiscal Programming Unit
Ministry of Finance

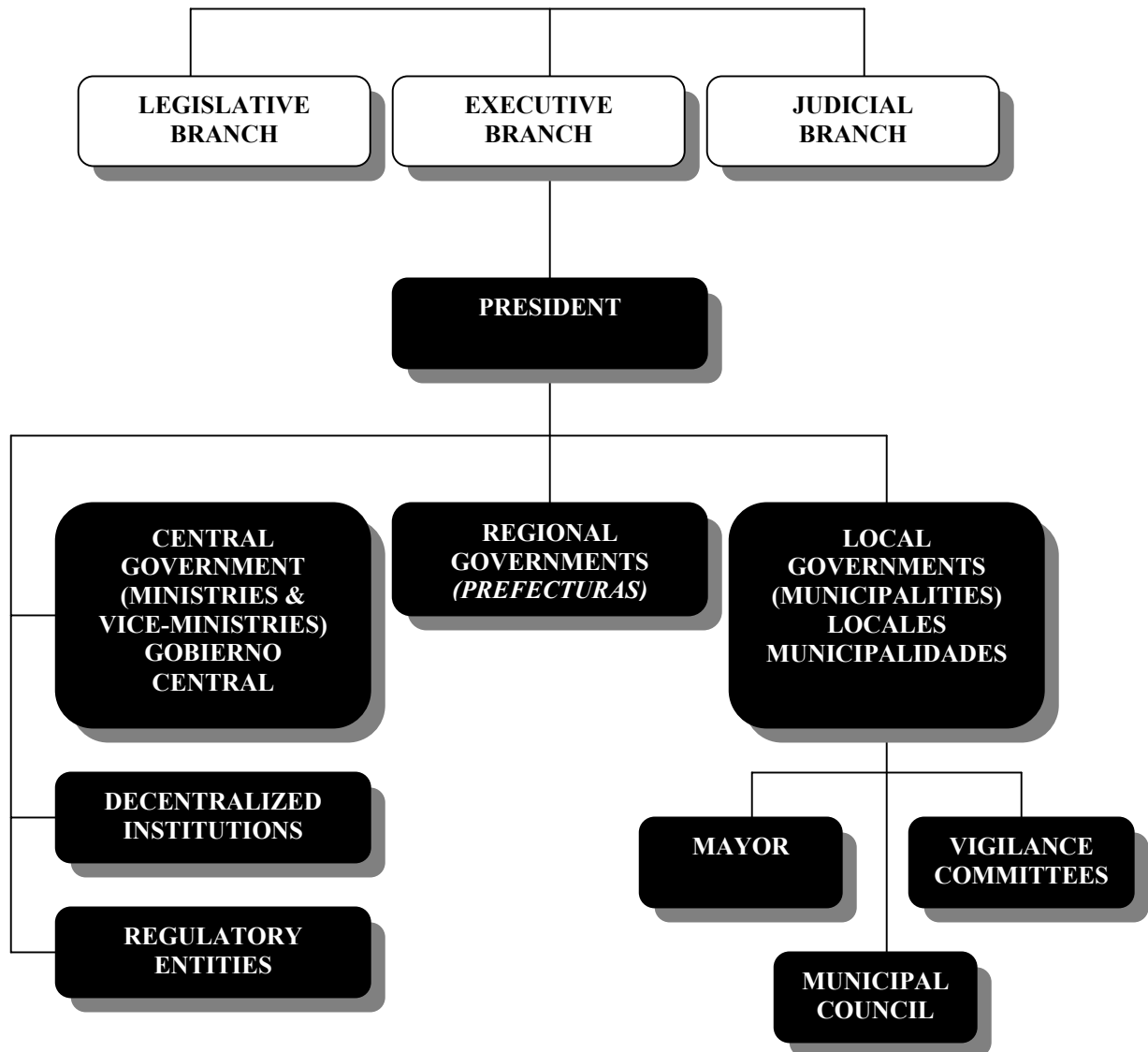
Marcelo Rejas Trigo

General Manager
International Society of Consultants—
Bolivia Chapter

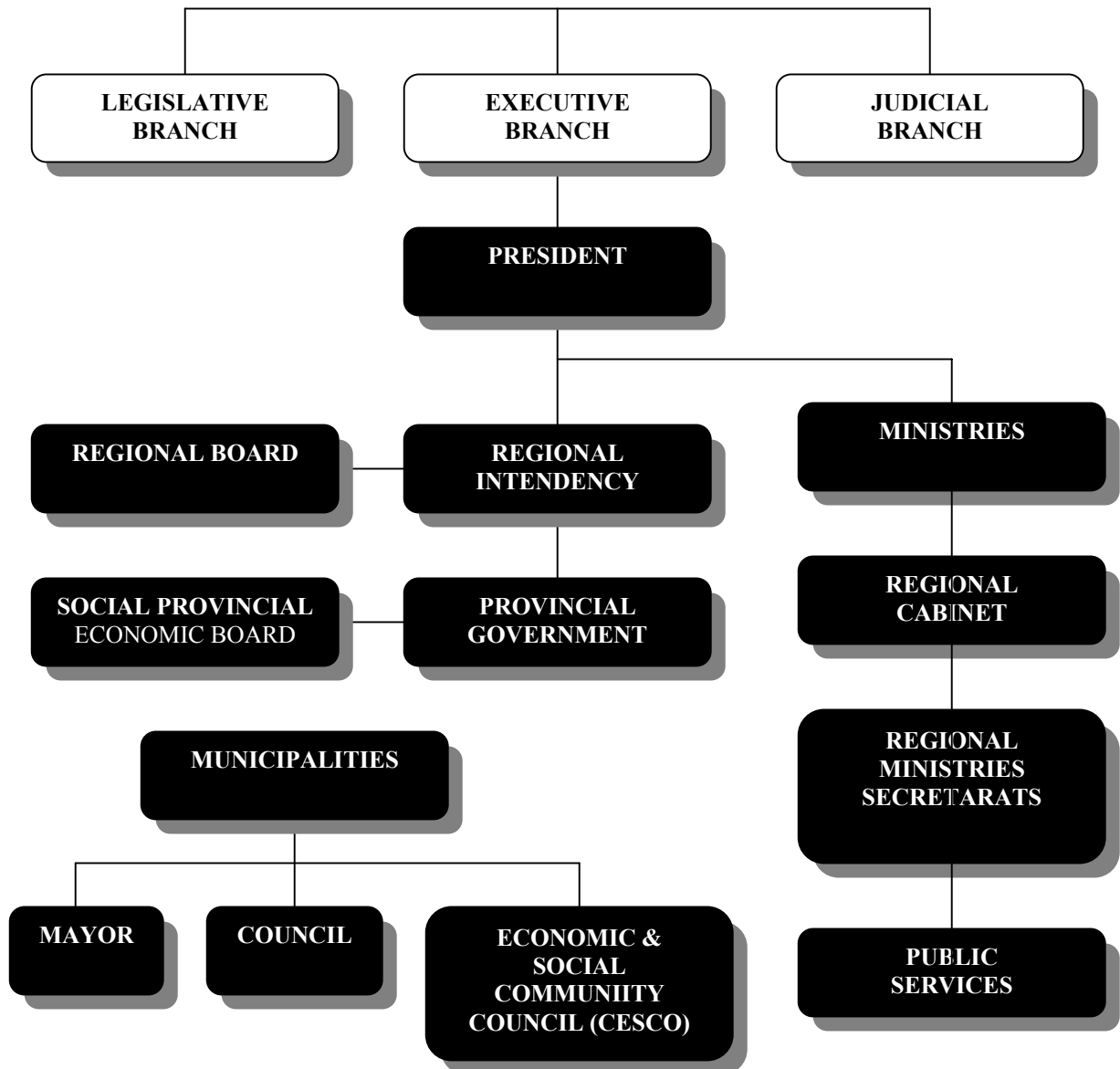
María Eugenia Yáñez

Finance Specialist
International Society of Consultants—
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Annex 3
Government of Bolivia
Basic Government Structure



Annex 4
Government of Chile
Basic Government Structure



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